



Form PTO 948 (Rev. 10-21-97)

U.S. DEPARTMENT OF COMMERCE - Patent and Trademark Office

Application No.

9/158,422

NOTICE OF DRAFTSPERSON'S
PATENT DRAWING REVIEW

COPY

The drawing(s) cited (insert date) 10-23-02 areA ☒ approved by the Draftsperson under 37 CFR 1.84 or 1.152.B ☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawing(s) when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.1. DRAWINGS. 37 CFR 1.84(a). Acceptable categories of drawings:
Black ink, color.☐ Color drawings are not acceptable until petition is granted.

Fig(s) _____

☐ Pen or non black ink not permitted. Fig(s) _____

2. PHOTOGRAPHS. 37 CFR 1.84(b).

☐ Full-tone set is required. Fig(s) _____☐ Photographs may not be mounted. 37 CFR 1.84(c).☐ Poor quality (half-tone). Fig(s) _____

3. TYPE OF PAPER. 37 CFR 1.84(c).

☐ Paper not flexible, strong, white, and durable.

Fig(s) _____

☐ Erasures, alterations, overwriting, interlineations,

tolds, copy machine marks not accepted. Fig(s) _____

☐ Milar, acetate paper is not acceptable (too thin).

Fig(s) _____

4. SIZE OF PAPER. 37 CFR 1.84(f). Acceptable sizes:

☐ 216 mm by 297 mm (DIN size A4)☐ 216 mm by 279 mm (8 1/2 x 11 inches)☐ All drawing sheets not the same size.

Sheet(s) _____

☐ Drawing sheets not an acceptable size. Fig(s) _____

5. MARGINS. 37 CFR 1.84(g). Acceptable margins:

Top 2.5 cm; Left 2.5 cm; Right 1.5 cm; Bottom 1.0 cm

SIZE: A4 size

Top 2.5 cm; Left 2.5 cm; Right 1.5 cm; Bottom 1.0 cm

SIZE: 8 1/2 x 11

Margin not acceptable. Fig(s) _____

Top (T) _____

Left (L) _____

Right (R) _____

Bottom (B) _____

6. VIEWS. 37 CFR 1.84(h).

REMINDER: Specification may require revision to

correspond to drawing changes.

Partial views. 37 CFR 1.84(h)(2).

☐ Brackets needed to show figure as one entity.

Fig(s) _____

☐ Views not labeled separately or properly.

Fig(s) _____

☐ Enlarged view not labeled separately or properly.

Fig(s) _____

7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3).

☐ Hatching not indicated for sectional portions of an object.

Fig(s) _____

☐ Sectional designation should be noted with Arabic or

Roman numbers. Fig(s) _____

8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i).

☐ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____

9. SCALE. 37 CFR 1.84(k).

☐ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction.

Fig(s) _____

10. CHARACTER OF LINES, NUMBERS, & LETTERS.

37 CFR 1.84(j).

☒ Lines, numbers & letters not uniformly thick and well

defined, clean, durable, and black (poor line quality).

Fig(s) 1

11. SHADING. 37 CFR 1.84(m).

☐ Solid black area, pale. Fig(s) _____☐ Solid black shading not permitted. Fig(s) _____☐ Shade lines, pale, rough and blurred. Fig(s) _____

12. NUMBERS, LETTERS, & REFERENCE CHARACTERS.

37 CFR 1.84(p).

☒ Numbers and reference characters not plain and legible.Fig(s) 1☒ Figure legends are poor. Fig(s) 1☐ Numbers and reference characters not oriented in the

same direction as the view. 37 CFR 1.84(p)(1).

Fig(s) _____

☐ English a phonetic not used. 37 CFR 1.84(p)(2).

Fig(s) _____

☐ Numbers, letters and reference characters must be at least

32 cm (1.25 inch) in height. 37 CFR 1.84(p)(3).

Fig(s) _____

13. LEAD LINES. 37 CFR 1.84(q).

☐ Lead lines cross each other. Fig(s) _____☐ Lead lines missing. Fig(s) _____

14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(u).

☐ Sheet not numbered consecutively, and in Arabic numerals

beginning with number 1. Sheet(s) _____

15. NUMBERING OF VIEWS. 37 CFR 1.84(u).

☐ Views not numbered consecutively, and in Arabic numerals,

beginning with number 1. Fig(s) _____

16. CORRECTIONS. 37 CFR 1.84(v).

☐ Corrections not made from prior PTO-948

dated _____

17. DESIGN DRAWINGS. 37 CFR 1.152.

☐ Surface shading shown not appropriate. Fig(s) _____☐ Solid black shading not used for color contrast.

Fig(s) _____

COMMENTS

REVIEWER

J. C. Hager

DATE

1-1-03

TELEPHONE NO.

763-268-930

ATTACHMENT TO PAPER NO.

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